

### **IN THE ABSTRACT OF THE DISCLOSURE:**

Please amend the abstract as follows:

#### **Abstract of the Disclosure**

Failure investigation in a SAN providing virtual volumes requires a high degree of knowledge from the SAN administrator. ~~Also, who also evaluates the relative severities of failure events issued from different devices must be evaluated by the SAN administrator.~~ The SAN manager obtains information from the management agents in the devices in the SAN. Using ~~the obtained~~ this information, the SAN manager manages the association ~~relations~~ between the server and the virtual volumes and the real volumes in the SAN. The SAN manager receives failure messages from multiple devices and uses the association ~~relations~~ and a failure analysis dictionary table to determine the contents of the failure messages and associations between failure messages. Failures that are causal failure are ~~identified and displayed.~~ The SAN manager is equipped with a conversion table for converting failure messages issued from different storage devices to a common severity. When a failure message is received, a notification is sent to a high-level program and to an administrator based on the common severity defined in the conversion table.